

Appl. No. 09/775,329
Reply to Examiner's Action dated 12/02/2005

IN THE CLAIMS:

1. (currently amended) A system for selecting open shortest path first (OSPF) aggregates to advertise, comprising:

a database configured to include candidate OSPF aggregates and corresponding weights, said candidate OSPF aggregates represented by trees; and

an aggregate selector, associated with said database, configured to select subsets of each of said trees to reduce an error thereof and combine said subsets to yield a subset to reduce an error associated with said trees, said subset to be advertised ~~at least a subset of said candidate OSPF aggregates to advertise~~ by an area border router such that a path length between a particular source and destination subnets selected from advertisement of weights corresponding to said subset approaches a shortest path length between said particular source and destination subnets irrespective of said weights advertised.

2. (previously presented) The system as recited in Claim 1 wherein said aggregate selector treats errors in said selected path length as having unequal degrees of importance.

3. (currently amended) A method of selecting open shortest path first (OSPF) aggregates for advertising, comprising:

storing data pertaining to candidate OSPF aggregates and corresponding weights, said candidate OSPF aggregates represented by trees; and

selecting subsets of each of said trees to reduce an error thereof; and

combining said subsets to yield a subset to reduce an error associated with said trees, said subset to be advertised ~~at least a subset of said data pertaining to said candidate OSPF aggregates to~~ advertise by an area border router such that a path length between a particular source and destination

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subnets selected from advertisement of weights corresponding to said subset approaches a shortest path length between said particular source and destination subnets irrespective of said weights advertised.

4. (previously presented) The method as recited in Claim 3 wherein said selecting comprises computing a lower bound of error for said candidate OSPF aggregates employing a set of recursive equations.

5. (currently amended) An autonomous network domain, comprising:
a plurality of routers and interconnecting segments that cooperate to form subnets and paths therebetween; and

a system for selecting open shortest path first (OSPF) aggregates for advertising, including:

a database for containing candidate OSPF aggregates and corresponding weights, said candidate OSPF aggregates represented by trees, and

an aggregate selector, associated with said database, that selects subsets of each of said trees to reduce an error thereof and combines said subsets to yield a subset to reduce an error associated with said trees, said subset to be advertised at least a subset of said candidate OSPF aggregates to advertise by an area border router such that a path length between a particular source and destination subnets selected from advertisement of weights corresponding to said subset approaches a shortest path length between said particular source and destination subnets irrespective of said weights advertised.

Claim 6 (canceled)

7. (currently amended) The A system as recited in Claim 1 further for selecting open shortest path first (OSPF) aggregate weights for a particular area, comprising:

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~~a database for containing data pertaining to candidate OSPF aggregates; and~~
a weight assigner, associated with said database, that assigns, for said OSPF aggregates, said weights based on an average distance of subnets in an said area to said a particular area border router (ABR) of said area.

8. (original) The system as recited in Claim 7 wherein said weight assigner employs a search heuristic to assign said weights.

9. (original) The system as recited in Claim 7 wherein said weight assigner treats errors in path lengths in said area as having unequal degrees of importance.

10. (currently amended) The A system as recited in Claim 1 further for selecting open shortest path first (OSPF) aggregate weights for a particular area, comprising:

~~a database for containing data pertaining to candidate OSPF aggregates; and~~
a weight assigner, associated with said database, that employs a search heuristic to assign said weights for said OSPF aggregates.

11. (original) The system as recited in Claim 10 wherein said weight assigner treats errors in path lengths in said area as having unequal degrees of importance.

12. (currently amended) The A method as recited in Claim 3 further of selecting open shortest path first (OSPF) aggregate weights for a particular area, comprising:

~~storing data pertaining to candidate OSPF aggregates in a database; and~~
assigning, for said OSPF aggregates, said weights based on an average distance of subnets in an said area to said a particular area border router (ABR) of said area.

13. (original) The method as recited in Claim 12 wherein said assigning comprises employing a search heuristic.

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14. (original) The method as recited in Claim 12 wherein said assigning comprises treating errors in path lengths in said area as having unequal degrees of importance.

15. (currently amended) The A method as recited in Claim 3 further of selecting open shortest path first (OSPF) aggregate weights for a particular area, comprising:

~~storing data pertaining to candidate OSPF aggregates in a database; and~~

employing a search heuristic to assign said weights for said OSPF aggregates.

16. (original) The method as recited in Claim 15 wherein said employing comprises treating errors in path lengths in said area as having unequal degrees of importance.

17. (currently amended) The An autonomous network domain as recited in Claim 5 wherein said system further includes , comprising:

~~a plurality of routers and interconnecting segments that cooperate to form subnets and paths therebetween; and~~

~~a system for selecting open shortest path first (OSPF) aggregate weights for a particular area in said domain, including:~~

~~a database for containing data pertaining to candidate OSPF aggregates, and~~

a weight assigner, associated with said database, that assigns, for said OSPF aggregates, said weights based on an average distance of said subnets in said domain to said a particular area border router (ABR) of said area.

18. (original) The domain as recited in Claim 17 wherein said weight assigner employs a search heuristic to assign said weights.

19. (original) The domain as recited in Claim 17 wherein said weight assigner treats errors in path lengths in said area as having unequal degrees of importance.

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20. (currently amended) The ~~An~~ autonomous network domain as recited in Claim 5 wherein said system further comprises ~~, comprising:~~

~~a plurality of routers and interconnecting segments that cooperate to form subnets and paths therebetween; and~~

~~a system for selecting open shortest path first (OSPF) aggregate weights for a particular area in said domain, including:~~

~~a database for containing data pertaining to candidate OSPF aggregates, and~~

~~a weight assigner, associated with said database, that employs a search heuristic to assign said weights for said OSPF aggregates.~~

21. (original) The domain as recited in Claim 20 wherein said weight assigner treats errors in path lengths in said area as having unequal degrees of importance.